ABSTRACT OF THE DISCLOSURE

A PN sequence phase searching apparatus in a multi-carrier CDMA mobile communication system. At least two PN sequence phase searchers search for the PN sequence phase of one of at least two different band input signals on different assigned search conditions and output PN phase and energy information. A controller assigns the different search conditions to the PN sequence phase searchers and determines a minimum phase variation period based on the PN phase and energy information received from the PN sequence phase searchers.